

REMARKS/ARGUMENTS

The office action of August 26, 2003 has been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of the instant application are respectfully requested.

Claims 27-29, 31-50 remain in this application. Claims 26 and 30 have been canceled. Claims 27-29, 31-50 are rejected. Claim 50 is allowed. Claim 42 has been amended to depend from claim 27.

Claims 43 and 45 stand rejected as lacking antecedent basis for the term "carrier." Claims 43 and 45 have been amended to correct the antecedence. Withdrawal of this rejection is requested.

Claims 27-29 and 38-40 stand rejected under 35 USC 103(a) as unpatentable over Cobben.

Claim 27 is directed to forge-proof document comprising a security feature in the form of a perforation pattern which displays gray tones when viewed against a bright background. The perforations are produced by a laser. At least some of the perforations forming part of the perforation pattern extend at an angle differing from 90° relative to the main plane of the document. That is, the document of claim 27 contains perforations formed at an angle oblique to the paper. Cobben does not teach or suggest producing a document containing perforations made at an oblique angle.

The oblique perforations obtained using an angle other than 90° provide optical effects even in documents of limited thickness. For example, the choice of the angle or other properties of the oblique perforation can be chosen such that during normal observation of the pattern at an angle of about 90°, a normal image appears, and that during observation at another angle, a second image, such as in the form of a logo or a letter combination, becomes visible. See Figures 2-4 which demonstrate how perforations at an oblique angle can be utilized in a document. Cobben simply does not teach or suggest this feature.

Cobben further does not teach or suggest modulating the angle in order to obtain the image or modulating the density or the diameter of the perforation in order to obtain the image as disclosed in claims 28 and 29. Cobben does not teach or suggest that the perforation pattern is adapted to present a stereo image to the observer from a viewing position, or that perforation pattern is adapted to present to the user an image which differs per angle of view as claimed in claims 38 and 39, or further that the angle of the perforations to the main plane of the document increase as the distance to the center of the perforation pattern increases as claimed in claim 40.

The Examiner contends that Cobben has the ability to make the claimed perforations. However, whether Cobben's device "has the ability" to make the claimed perforations is not the proper standard. Cobben does not teach or suggest making perforations at an oblique angle - that is at an angle differing from 90° relative to the main plane of the document in accordance with the instant claims nor any reason why skilled in the art would have made such perforations. Cobben instead discloses making perforations at a 90° angle as shown by holes 8 in Fig. 2.

Cobben does not teach or suggest a document having the perforations as claimed. Nor is there any suggestion to modify Cobbin to arrive at the instant claims. Withdrawal of the rejection of claims 27-29 and 38-40 over Cobben is requested.

Claims 31, 36, 37, 41-43 and 46-49 stand rejected under 35 USC 102(b) as being anticipated by Cobben (WO 95/26274).

Claim 31 is directed to a forge-proof document comprising a security feature in the form of a perforation pattern which represents an image and which displays gray tones when viewed against a bright background wherein material is arranged in the perforations.

Attention is drawn to paragraph 23 of the instant specification. Perforations arranged in a carrier in a pattern representing an image are filled with, for example, an ink which lights up under UV light. Such a pattern becomes visible if it is illuminated with a UV light source. In another embodiment in paragraph 24, the inner sides of the perforations of such a pattern are provided with a layer, for instance by vapor-deposition of a reflecting metal layer, resulting in an image which is visible when viewed. Selective application of a layer to the inner side of all

perforations is possible by arranging a removable foil before the perforations are arranged and removing it after said layer has been applied.

As described in paragraph 25, the document is built up of material layers of different colors. By modulating the depth, the perforation can be made to end in the desired layer and thereby make a desired color visible. An image in color can thus be realized.

Cobben describes perforations such as shown in Fig. 2, item 8 and creating V-shaped channels as shown in Fig. 3. Cobben does not teach or suggest providing perforations to provide gray tones. Nor does Cobben teach or suggest arranging material in the perforations in accordance with the instant claims. Withdrawal of this rejection is requested.

Claims 34 and 35 stand rejected under 35 USC 103(a) as unpatentable over Cobben. Cobben does not teach or suggest the document of claim 31 for the reasons described above. Nor is there any reason provided by Cobben to use differently colored material layers, wherein a color is visible depending on the depth of the perforation as recited in claim 34 or use plastic laminate and that the core layer has a color differing from the other layers as recited in claim 35. Withdrawal of the instant rejection is requested.

Claims 32, 33, 44 and 45 stand rejected under 35 USC 103(a) as unpatentable over Cobben in view of Belousov. Claims 32, 33, 44, and 45 depend from claim 31. Cobben does not teach or suggest the document of claim 31 for the reasons described above.

Belousov is directed to an information carrier having a polymeric structure, containing pits and perforations. The carrier forms a protective film element for the protection of articles and documents from counterfeiting and copying and is formed by a polymeric structure. The information carrier may be part of a plastic card such as a credit card or as a film applied to protect papers and other documents. The pits and perforations are formed by heavy ion irradiation, UV radiation, and etching. See column 10, lines 38+. After the holes are made, they can be refilled with another material to make the pattern more visible to the naked eye.

Belousov does not teach or suggest a document which displays gray tones against a bright background. Nor does Belousov teach or suggest a material arranged in the perforation such as,

Appln. No.: 09/889,598
Amendment dated November 20, 2003
Reply to Office Action of August 26, 2003

for example, to provide a color visible under UV light. There is no reason that one skilled in the art would have modified the document of Cobben in view of the information carrier having a polymeric structure described in Belousov to arrive at the document of the instant claims. Withdrawal of this rejection is requested.

CONCLUSION

It is believed that no fee is required for this submission. If any fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733, accordingly.

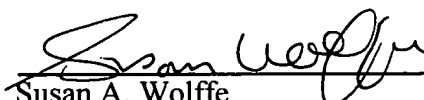
All rejections having been addressed, applicant respectfully submits that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same.

Respectfully submitted,

BANNER & WITCOFF, LTD.

Dated: November 20, 2003

By:


Susan A. Wolfe
Registration No. 33,568

1001 G Street, N.W.
Washington, D.C. 20001-4597
Tel: (202) 824-3000
Fax: (202) 824-3001